Remarks

Favorable reconsideration of this application is requested in view of the following remarks. For the reasons set forth below, Applicant respectfully submits that the claimed invention is allowable over the cited references.

The final Office Action dated May 3, 2005, indicated that claims 1-17, 19-25, 27 and 28 are rejected under 35 U.S.C. § 102(a) over Swanson *et al.* (U.S. Patent No. 6,292,911) and claims 18 and 26 are rejected under 35 U.S.C. § 103(a) over Swanson in view of Kim *et al.* (U.S. Publication No. 2002/0138678).

Applicant respectfully maintains the traversal of each of the rejections (Section 102(a) and Section 103(a)) because the Examiner fails to present a reference, or a combination of references, that corresponds to the claimed invention. Both rejections are based at least primarily on the '911 reference and Applicant submits that the rejections use a flawed application of this reference to Applicant's claimed invention. Applicant's claimed invention is directed to use of selectable programmable commands for generating different kinds of test traffic and monitoring a data path for test traffic using a feedback signal. The '911 reference teaches detecting errors in transmission using test patterns generated by a controller and sent to a data storage component on a data channel where the received test pattern is compared to the original test pattern. *See* Abstract. A review of the '911 reference reveals no teaching of the claimed programmable commands; state machine circuitry adapted to assemble portions of a first data stream into test-traffic, selected in response to the programmable commands; and a status and feedback circuit. Each of these missing aspects is discussed below.

The Examiner fails to present a reference that teaches the claimed programmable commands and therefore also fails to teach a memory arrangement adapted to buffer a plurality of programmable commands. The Examiner erroneously asserts at page 9, that "the programmable commands are the test bit patterns." However, the '911 reference states that the memory 24 merely stores the originally-sent test pattern, which constitutes data. *See, e.g.*, column 4, lines 4-5 and column 6, lines 22-24. Such data fails to correspond to the claimed programmable commands and no further teaching from the '911 reference has been shown to disclose programmable commands, as claimed.

The Examiner also fails to present a reference that teaches the claimed state machine circuitry. The Examiner's reliance on the LFSR 31 of Fig. 2 is misplaced. The

'911 reference discloses that the LFSR cycles through a designed sequence and after a complete cycle the LFSR repeats the same sequence, meaning that "the bit pattern sequence being generated is always predictable." *See, e.g.*, column 7, lines 20-24. The '911 reference fails to teach state machine circuitry that is "adapted to assemble portions of the first data stream into test-traffic wherein at least one of type, pattern and behavior-in-time is selected responsive to the programmable commands."

The Examiner fails to present a reference that teaches a status and feedback circuit, as claimed. The citation to column 7, lines 44-55, discusses a comparison to determine the accuracy of a test pattern received by a component with respect to the test pattern that was generated and transmitted to the component. The received test pattern is transmitted over the channel. No feedback circuit is identified, and no circuit has been identified that is adapted to monitor the digital data path for test-traffic. Moreover, no teachings in the '911 reference have been identified as generating a feedback signal indicative of at least one of test-traffic throughput and test-traffic quality, as claimed.

The '911 reference fails to correspond to the claimed invention with respect to at least these three aspects. Thus, the Examiner's misapplication of the '911 reference fails to provide proper rationale to support the Section 102(e) and 103(a) rejections. Without a presentation of correspondence to each of the claimed limitations, rejections are improper and cannot be maintained. Applicant accordingly requests that each of the rejections be withdrawn.

Moreover, as addressed in the previous Office Action Response filed on February 9, 2005, the Office Action is unclear as to which aspects of the '911 teachings correspond to the claim limitations. Claim terms such as traffic (or test-traffic), behavior-in-time, throughput, and quality are all absent from the '911 reference. Applicant therefore fails to recognize how the Office Action is asserting the '911 teachings as corresponding to Applicant's claimed invention. Moreover, Applicant fails to recognize any teachings in the '911 reference of programmable commands that are indicative of specific test-traffic parameters, as discussed at page 7 of the instant Specification. For example, the Specification explains that "traffic pattern" is described as a sequence of traffic generator operations, each operation typically including a direction (*e.g.*, read or write) and an address; and "traffic behavior-in-time" is described as a frequency of generated bus traffic with respect to time. The Office Action does not identify any commands related to

data path test-traffic, as claimed and therefore, also does not identify state machine circuitry adapted to assemble portions of the first data stream into test-traffic wherein at least one of type, pattern, and behavior-in-time is selected responsive to the programmable commands, as claimed.

With particular respect to the Section 103(a) rejection, Applicant traverses because the Office Action fails to present any evidence that the skilled artisan would be motivated to modify the '911 reference as asserted. The Office Action acknowledges that the '911 reference fails to teach a digital data path being an AHB protocol bus. In an attempt to overcome this deficiency, the Office Action suggests modifying the '911 teachings so that channel 12 is an AHB protocol bus "because the AHB bus allows the transfer of data from one device to another." Applicant respectfully submits that the '911 channel already allows the transfer of data from one device to another and that any bus, as the term is used in the electrical arts, would allow the transfer of data from one device to another. The Office Action presents no evidence from the cited references that the skilled artisan would replace the '911 channel 12 with a different type of bus, or more specifically, an AHB protocol bus. Without a presentation of evidence of motivation to modify the cited '911 reference, the Section 103(a) rejection is improper and Applicant requests that it be withdrawn.

In view of the remarks above, Applicant believes that each of the rejections has been overcome and the application is in condition for allowance. Should there be any remaining issues that could be readily addressed over the telephone, the Examiner is asked to contact the agent overseeing the application file, Mr. Peter Zawilski, of Philips Corporation at (408) 474-9063.

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